

EML2322L Competition Evaluation

Group Number: _____

	1 st Run	2 nd Run
Time to complete required targets:	_____	_____
Number of felled targets:	_____	_____

Note: teams receive a project grade bonus according to their competition performance. The team which fells the most bottles in the quickest time receives a 10% project bonus; the team which topples the fewest bottles in the slowest time receives 0% bonus, and all other teams receive a bonus proportional to their competition ranking.

(0: Unacceptable 20: Poor 40: Below Average 60: Satisfactory 80: Good 100: Excellent)

1. Project completed according to instructions listed for the assignment (20%)

(Size: 10% // POs: 20% // BOM: 40% // ECNs: 30%)

0 20 40 60 80 100

2. Attention to detail, development of technical ability, quality of project visually (20%)

(Use well designed, machined components & avoid band-aids like cardboard & duct tape)

0 20 40 60 80 100

3. Overall effectiveness / success of project (20%)

(20% for each required target)

0 20 40 60 80 100

4. Design reports (40%)

5. Project completed within the allocated \$50 budget

(NO = 10% project grade penalty)

YES / NO

6. Respect for laboratory resources & staff; project disassembly & cleanup (-10%)

(Disassemble project, clean out lab bin, clean work area, and submit toolbox check-off sheet)

0 25 50 75 100

Overall Project Grade: _____

Project Evaluation – Completed According to Instructions

Group number: _____

(0: Unacceptable (E) 20: Poor (D-) 40: Below Average (D) 60: Satisfactory (C) 80: Good (B) 100: Excellent (A))

1. Did the team correctly wire the robot within 5min according to the wiring schematic? (-20%)

YES / NO

2. Does the team's design fit completely within the 24" x 24" starting area? (10%)

YES / NO

3. Are POs submitted and do they include all purchased materials used on the robot (more than 6' of 80-20, material for hubs and motor mounts, sheetmetal, wood, PVC, etc.)? Are the sizes and lengths noted on the POs correct? If the team exceeded the allocated budget, please note it on the other side of this grading sheet. (20%)

Eval. rubric: missing PO: -20% // improperly completed PO: -10% each

0 20 40 60 80 100 OVER BUDGET

4. Are assembly drawings and BOM clear, complete and accurate? Are exploded views used where necessary to clearly identify individual components? Does the BOM include unique, sequential balloons and leaders? Does the BOM include ALL parts used on the robot including fasteners, string and tape? *Verify the BOM contains proper motor hardware and wheel hub screws, including quantities. While examining the robot, point to three items and ask the group to show you where they are on the BOM & assembly drawings. If nothing else stands out as lacking, I suggest (1) motor mounting hardware (i.e. M4x0.7 for Densos, M6x1.0 for Entstorts, 10-32 for Molons, etc.), (2) torque transmission fasteners (i.e. M8x1.25 nuts for Entstorts, 10-24 set screws for Densos, etc.) and (3) a frame connection bracket.* (40%)

Eval. rubric: missing or incorrect item: -5 to -10% each

0 20 40 60 80 100

5. Were ECNs used to document changes during the prototyping phase of the project? Are the ECNs complete and clear? Are original and updated part drawings submitted with each ECN? Were ECNs signed by a TA within one week of being initiated? (30%)

Eval. rubric: late ECN: -5% // missing ECN: -20% // improperly completed ECN: -10% each

0 20 40 60 80 100

Grader's notes: * PLEASE BE COMPASSIONATE, BUT THOROUGH.***** Place a small dot below the score you think is appropriate and I will check the team's paperwork when I grade DR4. If unsure about a grade assignment, place a question mark to the right of the scoring matrix for that grade and consult me or a senior course TA.